

CLAIMS

1. Green part having the following average mineral chemical composition, in percentages by weight on the basis of the mineral oxides:

5 $40\% \leq \text{Al}_2\text{O}_3 \leq 94\%$,
 $0\% \leq \text{ZrO}_2 \leq 41\%$,
 $2\% \leq \text{SiO}_2 \leq 22\%$,
 $1\% < \text{Y}_2\text{O}_3 + \text{V}_2\text{O}_5 + \text{TiO}_2 + \text{Sb}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Na}_2\text{O}$.

10 2. Green part according to claim 1, characterized in that, in percentages by weight on the basis of the mineral oxides:

$3\% \leq \text{SiO}_2$.

15 3. Green part according to either of claims 1 and 2, characterized in that, in percentages by weight on the basis of the mineral oxides:

$\text{TiO}_2 \geq 2\%$.

20 4. Green part according to one of the preceding claims, characterized in that, in percentages by weight on the basis of the mineral oxides:

$\text{Y}_2\text{O}_3 + \text{V}_2\text{O}_5 + \text{TiO}_2 + \text{Sb}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Na}_2\text{O} \leq 5\%$.

25 5. Green part according to one of the preceding claims, characterized in that, in percentages by weight on the basis of the mineral oxides:

$\text{Y}_2\text{O}_3 + \text{V}_2\text{O}_5 + \text{TiO}_2 + \text{Sb}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Na}_2\text{O} > 2\%$.

30 6. Green part according to one of the preceding claims, characterized in that, in percentages by weight on the basis of the mineral oxides:

$\text{Y}_2\text{O}_3 + \text{V}_2\text{O}_5 + \text{TiO}_2 + \text{Sb}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Na}_2\text{O} > 3\%$.

35 7. Green part according to any one of the preceding claims, characterized in that the content, in percentages by weight on the basis of the mineral oxides, of at least one oxide from Y_2O_3 , V_2O_5 , TiO_2 , Sb_2O_3 , Yb_2O_3 and Na_2O is greater than 1%.

35 8. Green part according to any one of the preceding claims, characterized in that the content, in percentages by weight on the basis of the mineral oxides, of at least one oxide from Y_2O_3 , V_2O_5 , TiO_2 , Sb_2O_3 , Yb_2O_3 and Na_2O is greater than 2%.

9. Green part according to any one of the preceding claims, characterized in that the content, in percentages by weight on the basis of the mineral oxides, of at least one oxide from Y_2O_3 , V_2O_5 , TiO_2 , Sb_2O_3 , Yb_2O_3 and Na_2O is greater than 3%.

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10. Green part according to any one of the preceding claims, characterized in that, in percentages by weight on the basis of the mineral oxides:

$$Y_2O_3 \geq 1\%.$$

10 11. Green part according to any one of the preceding claims, characterized in that, in percentages by weight on the basis of the mineral oxides:

$$Y_2O_3 \geq 2\%.$$

15 12. Green part according to any one of the preceding claims, characterized in that, in percentages by weight on the basis of the mineral oxides:

$$Y_2O_3 \geq 3\%.$$

13. Sintered refractory product obtained by sintering a green part according to one of the preceding claims.

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14. Use of a sintered refractory product according to claim 13 in a terminal region of a glassmaking furnace, in particular for the manufacture of soda-lime (CSL) or extra-white soda-lime (EWSL) glass.

25 15. Process for manufacturing a sintered refractory product, comprising at least the following successive steps:

a) preparation of a green part according to any one of claims 1 to 12 from a mixture of raw materials to which has been added an amount of greater than 1% of a constituent consisting of one or more of the oxides from Y_2O_3 , V_2O_5 , TiO_2 , Sb_2O_3 ,

30 Yb_2O_3 and Na_2O , in percentages by weight on the basis of the mineral oxides; and

b) sintering of said green part.